

## Abstracts

A65

age = 57.6 years). Two years after initiation of treatment, 48.7% patients showed overall clinical improvement. On average, patients received 367.5 days treatment after the index date. Patients experienced improvements from baseline in all measures: joint pain (4.0 vs. 4.3), joint swelling (3.0 vs. 3.2), stiffness (3.6 vs. 3.8), fatigue (4.2 vs. 4.4), CRP (3.1 vs. 4.1), and ESR (24.5 vs. 31.2) (all  $P < 0.001$ ). Percentages of patients improved  $>1$  point were 36.9% (joint pain), 38.0% (joint swelling), 28.2% (stiffness), 27.4% (fatigue), 94.1% (CRP), and 97.5% (ESR). **CONCLUSIONS:** Understanding the real world effectiveness of RA therapies under actual practice conditions is important in the treatment decision process. This chart review indicates that infliximab therapy had good long-term effectiveness in the treatment of RA. Studies to better understand the determinants of treatment adherence beyond clinical effectiveness are recommended.

PMS8

# **BIOLOGIC THERAPY REDUCES PATIENT-REPORTED SEVERITY OF RHEUMATOID ARTHRITIS IN THE REAL WORLD SETTING**

Tang B<sup>1</sup>, McKenzie RS<sup>1</sup>, Freedman D<sup>2</sup>, Wagner S<sup>2</sup>, Piech CT<sup>1</sup>

<sup>1</sup>Centocor Ortho Biotech Services, LLC, Horsham, PA, USA, <sup>2</sup>Consumer Health Sciences International, Princeton, NJ, USA

**OBJECTIVES:** To evaluate the clinical effectiveness of biologic therapies in the treatment of rheumatoid arthritis (RA) as measured by change in disease severity. **METHODS:** Patient self-reported data were collected from the 2008 Rheumatoid Arthritis Patient Study. Patients with RA were asked to rate their current disease severity (mild, moderate or severe), as well as severity at the time of diagnosis and before treatment. Comparisons were made between respondents who received biologic therapies (abatacept, adalimumab, etanercept, infliximab, or rituximab) versus those treated with non-biologic treatments. An improvement in severity is defined as less severe (changes from severe/moderate to moderate/mild) after the current treatment. **RESULTS:** Of 2048 respondents to the survey, the mean age was 51.9, and 74.3% were female. The average duration from RA diagnosis was 11.9 years. For patients treated with biologic therapies, the average duration of the treatment was 3.7 years. There were no statistical significant differences in age, gender and duration from RA diagnosis between patients who were treated with a biologic therapy versus those who were not. At baseline more patients reported their disease status as severe (47.2%) in the biologic group, compared to patients in the non-biologic group (21.3%). Only 9.7% of patients in the biologic group versus 29.5% of patients in the non-biologic group reported their disease status as mild. However, 44.6% of patients in the biologic group versus 25.9% of the non-biologic group reported an improvement in severity after the current treatment, while 11.6% of patients in the biologic group versus 15.3% of the non-biologic group reported increased severity in disease state (chi square  $P < 0.001$ ) after the current treatment. **CONCLUSIONS:** In the real world setting, RA patients treated with biologic therapies self-reported more severe disease than patients treated with non-biologic therapies. Biologic therapies significantly reduced patient-reported RA disease severity, compared to non-biologic therapies.

PMS9

# **TREATING ARTHRITIS OF THE KNEE: THE IMPACT ON PAIN IN PATIENTS' EVERYDAY LIVES**

Taieb C

Pierre Fabre, Boulogne, France

Arthritis of the knee is a real public health problem. Its prevalence is estimated at 6.1% of adults aged over 30 years, according to data from the Framingham Study. **OBJECTIVES:** To observe, in real use conditions, the effects obtained by Hyaluronic acid in the treatment of arthritis of the knee combined with a prescription of Sodium chondroitine sulfate between 2 treatments. **METHODS:** A longitudinal, prospective observation programme. **RESULTS:** Forty-two patients were treated with Hyaluronic acid® and Sodium chondroitine sulfate®, 19 patients were treated on the left side of the knee and 22 on the right side, with hyaluronic acid. At inclusion, average pain during daily life activities was  $53,289 \pm 20,836$ , at W18,  $37,963 \pm 17,173$  and at M6,  $35,625 \pm 17,956$ . Development of the pain during daily life activities between inclusion and W18 was significant ( $p = 0.0056$ ) as was the same between inclusion and M6 ( $p = 0.0011$ ). At inclusion, average pain at rest was  $29,167 \pm 16,889$ , at W18,  $19,792 \pm 14,255$  and at M6,  $19,217 \pm 17,399$ . Development of pain at rest between inclusion and W18 was not significant ( $p = 0.0594$ ) (however the  $p$ -value was very close to 0.05...) as was the same between inclusion and M6 ( $p = 0.0619$ ). **CONCLUSIONS:** The reduction of the pain – which was significant during patients' daily activities at 18 weeks, and then sustained at 6 months – is a testimony to the relevance of this treatment protocol. A greater number of trial subjects would make it possible to confirm the significance of the reduction of pain at rest.

PMS10

# **DOSING PATTERNS FOR RHEUMATOID ARTHRITIS PATIENTS TREATED WITH ABATACEPT OR INFlixIMAB**

Trivedi DN<sup>1</sup>, Chapman RH<sup>2</sup>, Smith D<sup>2</sup>, Semroc G<sup>2</sup>, Rosenblatt LC<sup>1</sup>

<sup>1</sup>Bristol-Myers Squibb, Plainsboro, NJ, USA, <sup>2</sup>IMS Health, Falls Church, VA, USA

**OBJECTIVES:** To determine dosing patterns associated with real-world treatment of rheumatoid arthritis (RA) patients with infliximab or abatacept. **METHODS:** An observational, retrospective (cohort) study of patients new to abatacept and infliximab was conducted using the PharMetrics Patient-Centric Database. All adult patients with at least one claim of RA diagnosis at or prior to initial treatment with infliximab or abatacept from March 2006 to June 2007 were selected. Patients were identified and

followed for at least 6 months based on their first infusion claim for infliximab or abatacept with no claims for any other biologic in the prior 6 months. Abatacept and infliximab cohorts were compared with respect to baseline characteristics and occurrence of upward dose adjustments (increase in dose or frequency). **RESULTS:** Forty abatacept and 216 infliximab patients were identified as new to biologic therapy. The two cohorts were generally similar, however 47.5% of initial infusions for abatacept patients were prescribed by a rheumatologist (also, 15% by primary care physician (PCP) and 37.5% unknown), compared to 72.7% for infliximab patients (with 4.6% by PCP and 22.6% unknown). Abatacept patients were less likely to experience upward dose adjustment than infliximab (10% vs. 57.9%, respectively). Multivariable Cox proportional hazards modeling (adjusted for age, gender, Charlson Comorbidity Index, and 1-year pre-index RA-related costs) determined that infliximab patients were more likely to experience upward dose adjustment than abatacept patients (HR = 5.5, 95% confidence interval = 2.0–14.9,  $p = 0.001$ ). **CONCLUSIONS:** Upward dose adjustment with some biologic therapies is common and may lead to unexpectedly higher treatment costs with additional safety considerations. In this study, upward dose adjustment appears to be less likely in patients started on abatacept than infliximab. Further research should determine if the fixed dosing pattern observed with abatacept continues over time, as health care providers and patients become more familiar with this biologic.

PMS11

# **RELATIONSHIP BETWEEN LEVELS OF PHYSICAL ACTIVITY AT WORK AND PREVALENCE OF ARTHRITIS AMONG WORKING POPULATION**

Bali V, Khan N

University of New Mexico, Albuquerque, NM, USA

**OBJECTIVES:** Arthritis is the most common chronic illness in the US. Various studies have found association between arthritis and physical demands of work. This study determines the relationship between physical activity at work and prevalence of arthritis among working population. **METHODS:** To distinguish between arthritic and non arthritic population we used question from the 2007 Behavioral Risk Factor Surveillance System (BRFSS) that indicates whether an individual was suffering from arthritis that had been diagnosed by physician. We also determined an individual level of physical activity at work through the question that classifies an individual level of physical activity at work into three levels. **RESULTS:** The sample consists of 205,533 respondents out of which (46, 078) 22.42% had arthritis and (15, 9455) 77.58% did not have any type of arthritis. Results from the logistic regression showed significant relationship between prevalence of arthritis and gender, age, race, education, income, reported health status, BMI, health coverage and physical activity at work ( $\alpha = 0.05$ ). There was inconsistent relationship among the level of physical activity and prevalence of arthritis as people having moderate physical activity had lesser odds (O.R.–0.965, 95% CI: 0.938–0.994) of suffering from arthritis i.e. one unit increase in moderate physical activity at work was associated with 3.5% decrease in the odds of suffering from arthritis. However, people having heavy physical activity at work had greater odds of (O.R.–1.265, 95% CI: 1.220–1.311) of suffering from arthritis indicating that one unit increase in heavy physical activity was associated with 27% increase in the odds of suffering from arthritis. **CONCLUSIONS:** There is a need to investigate in greater detail the role of physical activity at work in conjunction with other factors on the prevalence of arthritis. This investigation can help in identifying people susceptible to develop arthritis along with the factors responsible for their illness.

PMS12

# **FIBROMYALGIA: RUSSIAN RHEUMATOLOGISTS' KNOWLEDGE**

Nasonov E<sup>1</sup>, Le Lay K<sup>2</sup>, Soldatov D<sup>3</sup>, Taieb C<sup>2</sup>

<sup>1</sup>Rheumatology Institute-Russian Federation, Moscow, Russia, <sup>2</sup>Pierre Fabre, Boulogne, France,

<sup>3</sup>Pierre Fabre Laboratories, Moscow, Russia

**CONTEXT:** Fibromyalgia syndrome (FMS) is an under-diagnosed. **OBJECTIVES:** To describe Russian rheumatologists' knowledge of fibromyalgic patients. **METHODS:** The questionnaire was sent to a random sample of Russian practitioners, who were answering the same questionnaire as that used by French practitioners in 2003. **RESULTS:** The average number of patients seen daily by each practitioner was 58 (median 36 patients) 88% and 75% of the doctors claimed, individually, that they had not received any education on fibromyalgia or chronic fatigue during their medical studies. During their professional activity, 53.9% of the doctors have still not had any professional training on fibromyalgia. One percent of the doctors believed that fibromyalgia does not exist, while 36.5% believed that fibromyalgia is an illness and 63.2% that it is a syndrome. Forty percent of the doctors who answered were continuing to treat fibromyalgic patients, 28% referred them to a specialist rheumatologist, 14% to a neurologist and 9% to a psychiatrist. Excessive fatigue, diffuse pain, a tendency to feel depressed, anxious and sad, and muscle weakness were recognised respectively as being the main symptoms of fibromyalgia by 64, 77, 64 and 45 % of the rheumatologists respectively. Digestive problems, palpitations, swollen joints and radiological irregularities were recognised as being the main symptoms of fibromyalgia by 10, 13, 12 and 9% of the rheumatologists respectively. **CONCLUSIONS:** As in EC countries, a wide-scale training effort should be made in order to improve the diagnosing of patients. The data collected via these evaluations was close to the results for France.